
Myrcia inconspicua (Myrtaceae), a New Species from Espírito Santo, Brazil

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ABSTRACT. *Myrcia inconspicua* L. Kollmann & Sobral, a new species from montane forests of the Brazilian state of Espírito Santo, is described and illustrated. The species is characterized by solitary, axillary flowers, an uncommon feature in the genus, and by its shrubby habit and dense red-brown indument of branches and leaves. It is tentatively related to *Myrcia anomala* Cambessèdes, a subshrub from southern and central Brazil that occasionally bears solitary flowers.

RESUMO. *Myrcia inconspicua* L. Kollmann & Sobral, uma nova espécie das florestas montanas do estado do Espírito Santo, Brasil, é descrita e ilustrada. A espécie se caracteriza pelo hábito arbustivo, pelo denso indumento rufescente dos ramos e folhas e pelas flores solitárias e axilares, uma característica incomum no gênero. *Myrcia inconspicua* é tentativamente relacionada com *Myrcia anomala* Cambessèdes, subarbusto do centro e sul do Brasil que ocasionalmente apresenta flores solitárias.

Key words: Brazil, Espírito Santo, IUCN Conservation Status, *Myrcia*, Myrtaceae.

Myrcia DC. ex Guillaumin is an American genus of subtribe Myrciinae O. Berg with some 400 species (Landrum & Kawasaki, 1997) characterized by mostly paniculiform inflorescences, pentamerous flowers with bilocular ovaries bearing two ovules per locule, and embryos with two well-developed cotyledons and an evident hypocotyl (McVaugh, 1968; Landrum & Kawasaki, 1997).

During a study of the Myrtaceae in the municipality of Santa Teresa, in the coastal montane region of the Brazilian state of Espírito Santo, a curious species of *Myrcia* with solitary axillary flowers came to our attention; it is here described as new.

***Myrcia inconspicua* L. Kollmann & Sobral, sp. nov.**

TYPE: Brazil. Espírito Santo: Santa Teresa,

Penha, sítio de R. Pizziolo, 650 m, 1 Jan. 2004, L. Kollmann 6349 (holotype, MBML; isotype, MO). Figures 1, 2.

Species haec a congeneris floribus axillaribus solitariis sessilis vel subsessilis recedit.

Shrub 0.8–3 m high; branches flexuous with leaves distichously attached; twigs to 1 mm diam., densely covered with red-brown erect trichomes 1.5–3 mm in young twigs. Blades oblong to elliptic-oblong, 4.8–7.2 × 1.5–2.5 cm, bullate, slightly discolored, the young ones adaxially with scattered reddish spots visible even in dried material, glabrous adaxially and with erect rufous trichomes to 2 mm abaxially, these especially dense along the midvein; apex acute or occasionally obtuse; base cordate or obtuse; midvein sulcate adaxially and salient abaxially; secondary veins in 8 to 10 pairs, scarcely visible and sometimes slightly sulcate adaxially, raised abaxially; marginal vein somewhat discontinuous, formed by the arches of the secondary veins, 1–1.8 mm from the margin, the margin itself markedly ciliate at least in young leaves, the cilia to 2 mm; petioles 1–3.5 × 0.8–1 mm, with trichomes to 2 mm, sometimes concealed by the leaf bases when observed from above. Flowers solitary, axillary, set below the leaves and concealed when the branch is viewed from above; pedicels absent or to 1 × 1 mm; bracteoles persisting after anthesis, lanceolate to linear, 7–10 × 1–1.2 mm, slightly keeled, with trichomes 0.5–1 mm, more dense along the keel; flower buds not seen; calyx lobes 5, triangular-lanceolate, 3–4.5 × 1.5–2 mm, erect at anthesis and slightly unequal, glabrous adaxially and with erect red-brown trichomes to 1 mm abaxially; petals white, rounded to obovate, 3–5 × 3–4 mm, glabrous or with scattered trichomes to 0.2 mm; stamens 70 to 80, 3–5 mm, the anthers subquadrate or trapezoidal, 0.4 × 0.3–0.4 mm, with no evident gland in the examined flowers; staminal ring rounded, about 2 mm diam., with scarce red-brown trichomes




Figure 1. *Myrcia inconspicua* L. Kollman & Sobral. From the holotype, Kollmann 6349 (MBML).

0.1–0.2 mm; calyx tube present, to 0.5 mm deep; style 5 mm, the stigma punctiform and minutely papillose; ovary 2-locular, with 2 ovules per locule. Fruits immature, globose to globose-ellipsoid, to 6–7 × 5 mm, with trichomes 1–1.5 mm; seed 1 per fruit, reniform, 5 × 4 mm; embryo with 2 folded cotyledons 7–8 × 4 mm, surrounded by a coiled hypocotyl to 8 × 1 mm.

Affinities. Most *Myrcia* have flowers along a well-developed paniculiform or racemiform axis. Although species with three flowers along a developed axis are not rare, few species are known where axes are drastically reduced and only a single flower is present, such as *Myrcia anomala* Cambessèdes (Cambessèdes, 1832–1833; Legrand & Klein, 1969), *M. sessiliflora* McVaugh (McVaugh, 1969), and *M. gentryi* B. Holst

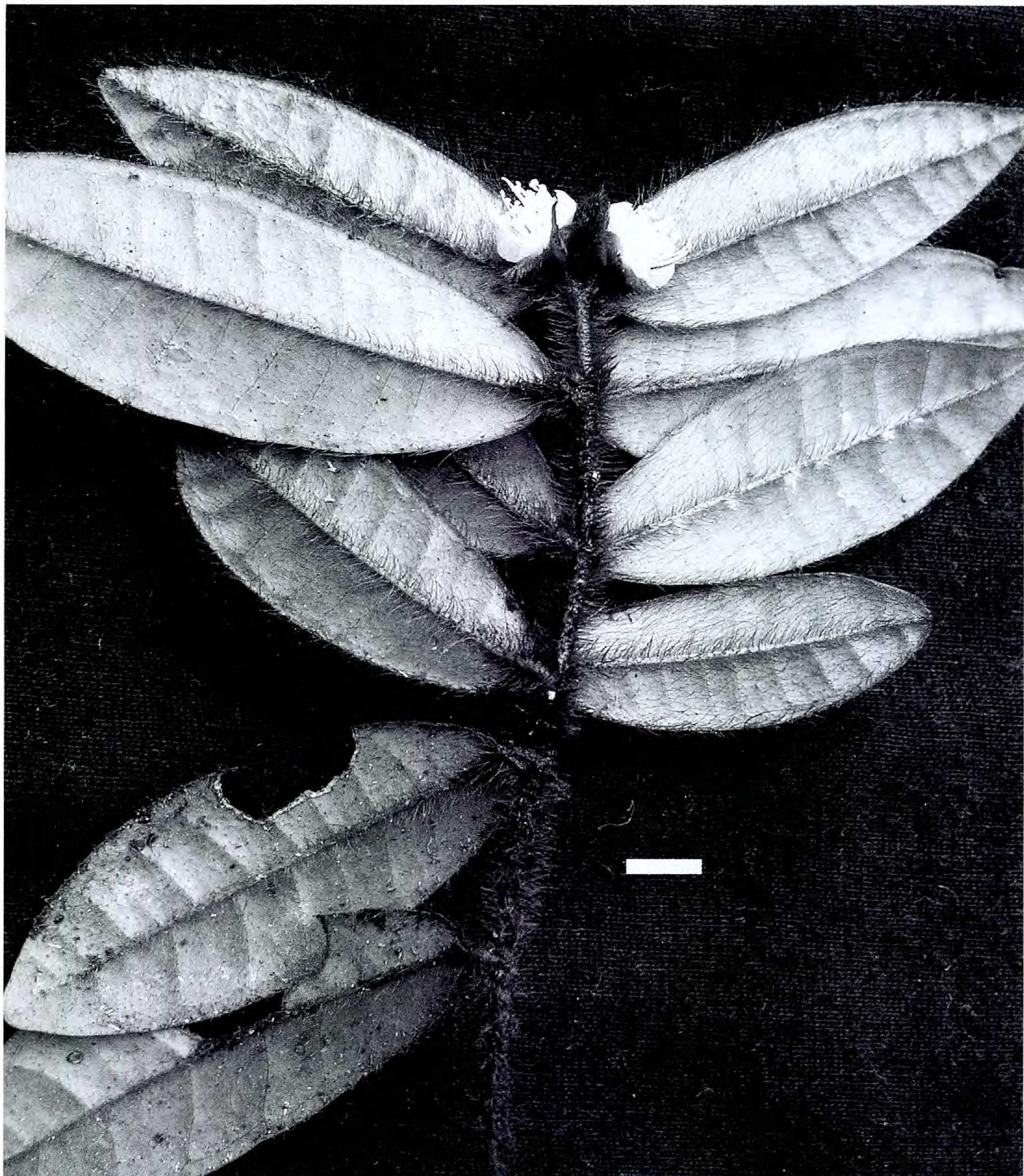


Figure 2. *Myrcia inconspicua* L. Kollman & Sobral. Flowers photographed from the abaxial side of the branch (Kollmann 6349, MBML; photograph by L. Kollmann). Scale bar = 10 mm.

(Holst, 2004). Nevertheless, in these species this condition is apparently occasional and due to a local reduction of the inflorescence axis, while other parts of the branch bear flowers on a more developed axis, as is the case even in *M. gentryi*, where some inflorescences bear more than one flower (Holst, 2004: 5). In *M. inconspicua*, however, inflorescences are consistently reduced to only one sessile or subsessile flower without an evident axis, a quite unusual feature in the genus. In the exsiccatae we

have examined, we could not find any vestigial bud or bract scar that would indicate abortion of an axis. During a survey of the inflorescence structure of *Myrcia*, we have found two South American species with names suggestive of solitary flowers, *Myrcia uniflora* Barbosa Rodrigues ex Chodat & Hassler and *M. monantha* Barbosa Rodrigues ex Chodat & Hassler (Chodat & Hassler, 1907). Both species indeed belong to *Eugenia* L., respectively to *E. punicifolia* (Kunth) DC. and *E. plurisepala* Barbosa Rodrigues ex Chodat

& Hassler, and their inclusion in *Myrcia* by Barbosa Rodrigues was evidently a mistake. We have also considered the possibility that such a distinct plant as *M. inconspicua* could belong to *Myrceugenia* O. Berg rather than *Myrcia*. *Myrceugenia* is the only genus with myrcioid affinities with species that bear consistently solitary flowers (Landrum, 1981). Nevertheless, flowers in *Myrceugenia* are always 4-merous and devoid of calyx tubes, and locules are largely multiovulate (although individuals of some species occasionally present two ovules per locule) (Landrum, 1981).

Myrcia inconspicua is tentatively related to the central and southern Brazilian *Myrcia anomala*, with which it shares lanceolate bracteoles and calyx lobes and in which flowers occasionally appear solitary. The following key couplet states the differences between them:

- 1a. Subshrubs to 0.5 m; branches glabrous or with gray trichomes less than 1 mm long; blades markedly reticulate-veined; apex mucronate to 1 mm; bracteoles deciduous at anthesis; flowers occasionally solitary in some leaf axils (but inflorescences with a more or less developed axis also present); cerrados and open fields of southern and central Brazil *Myrcia anomala*
- 1b. Subshrubs to shrubs 0.8–3 m tall; branches densely covered with red-brown trichomes 1.5–3 mm; blades not visibly reticulate-veined; apex widely acute or obtuse, not mucronate; bracteoles persisting after anthesis; flowers solitary in leaf axils; coastal montane forests from eastern Brazil *Myrcia inconspicua*

Habitat, distribution, and phenology. *Myrcia inconspicua* is a shrub from shaded, montane forests (Atlantic forest) from the central montane zone of Espírito Santo, at altitudes between 650 and 850 m above sea level. It occurs in relatively undisturbed forests and has a marked preference for more densely shaded portions of the forests. Its distribution is patchy, with several individuals growing together and with long distances between groups (we have observed about 20 to 30 individuals in each group). Currently, the species is known only from two municipalities, Santa Maria de Jetibá and Santa Teresa. Flowers were collected in January and fruits from January to March.

Conservation. The municipalities of Santa Maria de Jetibá and Santa Teresa are located in central Espírito Santo, occupying an area of approximately 1500 km². The central region of Espírito Santo has been intensely deforested during the 20th century for farming, agriculture, and timber trade, and most

municipalities have very small areas with original vegetation. Data from Santa Teresa (Mendes & Padovan, 2000: 16) report only 18% of the municipality area as still bearing original vegetation. Although we did not find recent data for the municipality of Santa Maria de Jetibá, its economy and land use are similar. According to the IUCN criteria for threatened species (IUCN, 2001), *Myrcia inconspicua* could be considered at least an endangered species (EN), because it fits criteria B2 (area of occupancy estimated to be less than 500 km²—as is the case due to its patchiness), B2a (habitat severely fragmented), and B2b(iii) (continuing decline observed in area, extent, and quality of habitat—as is the case since forest removal has not ceased in central Espírito Santo).

Etymology. The epithet is from the Latin word for “unnoticeable” and alludes to the unusual orientation of the flowers, which are obscured beneath the leaves, as well as to the habit, since its small height and tiny, flexuous branches cause it to be scarcely noticeable in its habitat.

Paratypes. BRAZIL, Espírito Santo: Santa Maria de Jetibá, L. Kollmann & M. V. S. Berger 5981 (BHCB, MBML); idem, H. Q. Boudet Fernandes, A. M. Assis, V. Demuner, E. Bausen, R. Vervloet & J. Bremekamp 3293 (MBM, MBML); Santa Teresa, L. Kollmann & M. Sobral 6574, 6575, 6577, 6578, 6583 (all MBML); idem, Penha, sítio de R. Pizziolo, L. Kollmann & R. Kollmann 7288 (MBML).

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